

## **NOSB Handling Committee Recommendation**

### **How to Calculate the Percentage of Organic Ingredients in Organic Tea?**

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#### **Introduction:**

The following scenario has been presented to the National Organic Program (NOP) for clarification:

A manufacturer of an organic tea beverage has asked for clarification on how to calculate the percentage of organic ingredients for her tea product. Tea leaves are brewed in water and then removed. Organic sugar, a natural flavor, and citric acid are added to the brewed tea to formulate a final product.

#### **Background:**

Historically the organic industry has approached the NOP and the NOSB concerning the calculation of percent organic ingredients specifically relating to multi-ingredient products that do not currently have a standard of identity.

#### **Recommendation:**

##### **QUESTION-**

1. To calculate the percentage of organic ingredients, does the manufacturer use the dry weight of the tea leaves as the amount of tea in the final product? **YES**. Or does the manufacturer use the flavor infused from the tea leaves (or some other measurement) as the amount of tea in the final product? Please provide your rationale.

JR comments:

Section 205.302 “Calculating the percentage of organically produced ingredients” states:

“(a) The percentage of all organically produced ingredients in an agricultural product sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)),” or that include organic ingredients must be calculated by:

(1) Dividing the total net weight (excluding water and salt) of combined organic ingredients at formulation by the total weight (excluding water and salt) of the finished product.”

The National Organic Program “Draft Compliance Audit Checklist,” dated 3/12/02, provides further guidance by stating:

“For solids--divide the total net weight of combined organic ingredients at formulation by the total weight of all ingredients.

For liquids--divide the fluid volume of all organic ingredients by the fluid volume of all ingredients if the product and ingredients are liquid.

For products containing organically produced solid and liquid ingredients--divide the combined weight of the solid ingredients and the weight of the liquid ingredients by the total weight (excluding water and salt) of all ingredients.”

In response to the questions above, the manufacturer should use the net weight of the flavor infused from the tea leaves in the calculation. This can be determined by establishing the net weight of the tea leaves before infusion (T1). The tea leaves should be dried on low heat to standardized moisture content prior to weighing to remove atmospheric moisture. After infusion, the tea leaves are dried to the same moisture content as prior to infusion, and then weighed (T2).  $T1 - T2 = T3$ , the net weight of the tea used as an ingredient in the organic product.

#### Handling Committee Discussion:

The committee supports using the dry weight of the tea leaves as the amount of tea in the final product. We recognize that the aforementioned example depicts a “liquid tea flavor” or “brewed tea” at formulation and thus could be interpreted as a “liquid”. But, in the example provided the manufacturer begins the tea making process with dried tea leaves. In most cases the weight difference between the dry tea leaves pre-infusion vs. tea leaves dried to standardized moisture post infusion would be miniscule. Further, drying the tea leaves post infusion to standardized moisture for weight measurement would be nearly impossible to integrate as a standard operating procedure and could cause undo burden on such operations. **Therefore, in the case of tea, the committee recommends calculating the dry or “solid” weight of the tea leaves for calculating the percent of organic ingredients as stated in The National Organic Program “Draft Compliance Audit Checklist,” dated 3/12/02.**

#### QUESTION-

2. To calculate the percentage of organic ingredients, does the manufacturer include or exclude the amount of water used to formulate the final product? Please provide your rationale. **EXCLUDE.**

JR comments:

Water should be excluded to calculate percentage of organic ingredients. A policy statement posted August 23, 2002 by the NOP states:

“Section 205.302(a) requires a handler to exclude added water and salt from the weight and/or fluid volume of organic ingredients at formulation and to exclude salt and water from the total net weight of the finished product when calculating the percentage of organically produced ingredients in a product.

Water used as an ingredient in a multi-ingredient food, including water used to reconstitute a dehydrate (e.g. tomato powder, carrot dice, or celery powder), must be excluded when calculating the percentage of organically produced ingredients.”

For the example given above, the organic ingredients are organic tea flavor (T3) and organic sugar. The non-organic ingredients are natural flavor and citric acid. The percentage of organic ingredients is determined by adding the weight of the organic ingredients (T3 + organic sugar) and dividing the sum by the weight of all ingredients (T3 + organic sugar + natural flavor + citric acid).

**Minority Opinion:**

. Some members felt that an operation could implement testing procedures such that a percent of the tea batches produced could be tested regarding the weight difference between the dry tea leaves pre-infusion vs. tea leaves dried to standardized moisture post infusion. These sample tests as a percent of the total batches of tea produced could document and verify the accuracy of the calculation of percent organic ingredients per formulation. This could be implemented in the following manner:

The manufacturer could use the net weight of the flavor infused from the tea leaves in the calculation. This can be determined by establishing the standardized weight of the tea leaves before infusion (T1). The tea leaves should be dried on low heat to standardized moisture content prior to weighing to remove atmospheric moisture. After infusion, the tea leaves are dried to the same moisture content as prior to infusion, and then weighed (T2).  $T1 - T2 = T3$ , the net weight of the tea used as an ingredient in the organic product.

**Committee Vote:**

**Yes----3**

**No----0**

**Abstentions-----2**